Latin parts of speech in historical and typological context

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DOI: https://doi.org/10.1515/joll-2014-0012

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Keywords: parts of speech, adjective, adverb, inflection, diachrony, typology

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1 Introduction

The present paper is devoted to parts of speech, that is, to those series of lexemes that share certain formal or functional properties, such as nouns, verbs, adjectives, adverbs, etc. (cf. Award 2001: 726; Dürscheid 2012: 19),[1] with particular attention to Latin.

1 The use of morphological, syntactic, or semantic criteria for the identification of parts of speech may depend on the language under investigation. In languages provided with a rich morphology, parts of speech are usually described according to morphological criteria, whereby a word may be inflectable or non-inflectable and may show different kinds of inflectional endings. In languages with a rigid word order like English, instead, syntactic criteria are more relevant to the identification of parts of speech, which in this case are distinguished according to their possible positions in the clause. Semantic criteria are based on meanings such as "objects," "events," or "qualities." At present, however, no consensus exists on which criteria may be better employed to categorize parts of speech cross-linguistically. Some scholars adopt semantic criteria because of their potentially universal application ("the semantic virtues of the traditional se-

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It is well known that the parts of speech of modern Indo-European (IE) languages are fundamentally based on the parts of speech of classical languages, notably Latin, whose grammatical categorization has been transmitted in educational training from the Middle Ages to the Modern Era, and which has strongly influenced many literary languages of Europe (Vineis and Maierù 1994). It is also acknowledged that Latin parts of speech are not valid for all languages of the world, although they have been often imposed on the descriptions of linguistic structures in many exotic domains (Hopper and Thompson 1984; Langacker 1987; Croft 1991; Haspelmath 2007; Haspelmath 2010; Adli et al. 2014). Most difficulties appear for some indigenous North-American language families such as Salish, Wakashan, Chimakuan, or Eskimo-Aleutine (Whorf 1945; Kuipers 1968; Walter 1981; Kinkade 1983; Jelinek and Demers 1994) and for Austronesian languages, where even the distinction between nouns and verbs is not so watertight, as Gil (2000) illustrates:

> The concern with word classes, parts of speech, [. . .] syntactic categories, dates back to antiquity – for better and for worse. For better, since in linguistics, as in any other discipline, one sees further when standing on the shoulders of giants. But for worse, if it is the case that the giants themselves are standing in the wrong place. Or, in the case at hand, in the wrong continent. My own interest in syntactic categories derives from ongoing attempts to obtain a better understanding of the major syntactic patterns of some languages whose syntactic structures appear to be very different from those of the classical languages of antiquity, and the well-known and well-studied languages of Europe. Increasingly, these efforts suggest that contemporary theories and frameworks do not provide the appropriate tools for a satisfactory description of such "exotic" languages. In general, available theories are of European origin, reflecting the peculiar properties of the particular European languages familiar to their progenitors. Often, their application to languages spoken in other parts of the world is an exercise of Eurocentricity, involving the unwarranted imposition of categories and structures that are simply irrelevant. (Gil 2000: 173; cf. also Brøndal 1948: 23; Vogel and Comrie 2000; Ansaldo et al. 2008)

It is seldom observed, however, that Latin parts of speech can rarely be applied to other early IE languages or to the earliest stages of Latin itself. It is also not usu-

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mantic analysis of syntactic categories appear to be greater than those of the categorial analysis," Croft 1991: 40; cf. also Brøndal 1948: 33, 65–67, 173; Lyons 1966; Clark and Clark 1979; Dixon 1977; Langacker 1987; Wierzbicka 1988; Wierzbicka 2000; Bhat 1994: 155–156), while some others consider formal criteria, of morphological or syntactic nature, to be more reliable, since they are less vague and more immediately observable ("it is assumed here that the primary criteria for parts-of-speech classification are grammatical, not semantic," Schachter and Shopen 2007: 1; cf. also Newman 1967: 192ff; Van Wyk 1967: 245ff; Lyons 1977: II, 447; Lemaréchal 1989: 29; Newmeyer 2007).

ally acknowledged that even in classical times there is no established tradition of parts of speech in Rome; on the contrary, the theory of Latin parts of speech emerges from a long and inhomogeneous dialectics among different schools of grammar or philosophy of which Western grammatical tradition only adopted the latest product. The aim of this paper is to discuss these relatively neglected and controversial points by taking into account on the one hand a comparison with other early IE languages, especially Ancient Greek and Sanskrit, and on the other hand the findings of typological research on parts of speech and lexical categorization cross-linguistically.

2 Parts of speech in Rome and in Greece

2.1 Modern features of Latin and Greek parts of speech

The categorization of lexicon into different parts of speech adopted by the grammatical tradition of the languages of Europe goes back to the Greek and Latin grammarians of *post*-classical times. Priscian (fifth–sixth century AD) distinguished eight "parts of speech" (*partes orationis*), that is, noun (*nomen*), verb (*verbum*), conjunction (*coniunctio*), participle (*participium*), pronoun (*pronomen*), preposition (*praepositio*), adverb (*adverbium*), and interjection (*interiectio*). This is a clear imitation of the Greek distinction into eight μέρη τοῦ λόγου transmitted by Dionysios Thrax (first century AD),[2] the author of a τέχνη γραμματική, and by Apollonios Dyskolos (second century AD), who wrote a περὶ συντάξεως in four volumes, and to whom three *scripta minora* on pronouns, adverbs, and conjunction are also ascribed.[3] Their list of parts of speech comprehended ὄνομα, ῥῆμα,

2 I don't take into account the question whether Dionysius' τέχνη has been written actually by Dionysius Thrax (the authenticity has been denied by Di Benedetto [1958], Di Benedetto [1959], and Di Benedetto [1973], defended by other specialists as Fuhrmann [1960: 29–34], Pfeiffer [1968: 270–272], Erbse [1980: 255–258], Flobert [1990], Callipo [2011], Calboli [2014]).

3 Especially Apollonios Dyskolos (*Synt*. §9ff) offers a quite detailed description of parts of speech on the basis of their syntactic position and (in)dependence, whereby syntactic units such as word (λέξις) and clause (λόγος) are compared to prosodic units of syllable (συλλαβή) and sound (στοιχεῖον 'letter'; the distinction between phoneme and grapheme was not yet clear in antiquity, also because the reading was loud). As sounds may be constrained in their position (sibilants, for example, may only appear before, and not after, a nexus of *muta cum liquida* in Ancient Greek: σκλ-, σπρ- versus *κλσ-, *πρσ-), in the same way some parts of speech may be only preposed, as in the case of articles and prepositions, while others may be only postposed, as in the case of the modal particle ἄν, belonging to the so-called "postpositives" in Dover (1960: 12). Moreover, as not all sounds are equally independent (vowels can also be pronounced in isola-

σύνδεσμος, μετοχή, ἀντωνυμία, πρόθεσις, ἐπίρρημα, ἄρθρον. In order to keep the same amount of eight categories, the absence of the article (ἄρθρον) in Latin is compensated by the identification of another part of speech in this language: interjection (cf. Brøndal 1948: 24ff; Robins 1966; Householder 1967; Matthews 1967; Matthews 1994; Calboli Montefusco 2003).

The modernity of this categorization appears in the high number of closed categories such as conjunction, pronoun, preposition, article, interjection, which in these languages are already quite grammaticalized. Greek is the first IE language to develop a definite article. In both Greek and Latin, conjunctions may be associated to certain grammatical moods or tenses to express subordinating relations. Latin *ut*, for example, triggers the indicative for a comparative/temporal function and the subjunctive for purposive and consecutive functions. Nothing similar exists in Old Indian, which has a rich inventory of tenses and moods, and which, however, does not present particular constraints of verbal forms in subordination.[4] A grammaticalization of the pronominal category may be seen in the Classical Greek development of reflexive pronouns for the first person (ἐμαυτόν) and for the second person (σεαυτόν), as well as in the Latin grammatical distinction between reflexive and anaphoric pronouns (*suus* versus *eius*) also in attributive function. Instead, most early IE languages have reflexive pronouns for the third person and personal pronouns for the first and second person, while possessive forms are usually ambiguous between a reflexive and anaphoric reading.[5]

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tion, while consonants always need the additional presence of a vowel in order to build a syllable), in the same way some parts of speech such as articles, prepositions, and conjunctions imply the presence of other constituents, while nouns, verbs, pronouns, and adverbs may be also used alone, for example as an answer to a question. Apollonios Dyskolos (§12) mentions the case of adverbs such as καλῶς 'well', κάλλιστα 'very well', and ὑγιῶς 'bravo', which may be shouted to an actor in the theatre.

4 This does not mean that other early IE languages are deprived of strategies to distinguish formally subordinate clauses from independent clauses. Old Irish has a special verbal form for relative clauses, for example. Tocharian uses the optative for the verb of a subordinate clause depending on a main verb inflected in the past tense, similarly to the distribution of the oblique optative in Ancient Greek, while main verbs in the present trigger the subjunctive in their dependent clause. No other early IE language, however, shows an articulate system of subordinating devices like that of Ancient Greek and especially of Latin, where the *consecutio temporum* appears since the earliest documents and has parallels also in Sabellic languages (cf. Meillet 1928: 66).

5 Actually, reflexive strategies manifest a high structural variety in IE. Besides the pronominal stem **se-/s(e)we-*, which originally was limited to the third person, as in Latin, and which in Baltic was extended to the first and second person, also nominal stems meaning 'body', 'soul', or

Prepositions are also highly grammaticalized in Latin and Classical Greek: inherited adpositions going back to PIE adverbial forms show a quite stable word order before the noun in these languages, and in classical epochs they consistently select certain grammatical cases to form full-fledged prepositional phrases. In Vedic, instead, adpositions are characterized by polyptotic usages and may often be used at distance from their nominal complements in structures that are not only motivated by meter and that rather reveal their still adverbial distribution (cf. Speyer 1886: 113ff; Speyer 1896: 79–94; Delbrück 1888: §12; García Ramón 1997; Hettrich 1988; Hettrich 2002; Schneider 2010; Casaretto 2011). Preverbs are established strategies of word formation not only in Classical Greek (unlike the extensive use of tmesis of Homeric Greek), but also in Latin since its earliest documentation, where tmesis is only recorded for some religious formulas such as *ad vos sacro* 'I implore you' for *obsecro vos* and *sub vos placo* 'I supplicate you' for *supplico vos* attested by Festus. Quite differently, a separation of preverbs and verbs is still frequent not only in Vedic, but also in Hittite (cf. Starke 1977; Francia 2002). In the regularized use of these parts of speech, classical languages therefore resemble their modern descendants.

2.2 Archaic features of Latin and Greek parts of speech

On the other hand, the categorization of classical languages presents some archaic features. First, some of the above-mentioned closed categories are not yet entrenched, or have a much more flexible distribution, in Old Latin and in Homeric Greek. Homeric Greek only begins to introduce the definite article, for example; furthermore, the use of a certain grammatical case in dependence of a preposition is not yet established (Luraghi 2003). Second, both classical languages are characterized by the absence of the adjective in their parts of speech, which in the entire history of these languages is not considered as an autonomous category, but rather as a type of noun (ὄνομα ἐπιθετικόν / *nomen adjectivum*), as can be seen in the definitions of Dionysius Thrax and of Priscian in (1) and (2). The same holds true for Old Indian, as we will see in Section 5.

'person' are recruited for the reflexive function in Tocharian, Indo-Iranian, Classical Armenian, and Albanian. In Hittite, reflexivity is coded by the particle – *za*-, which however does not have a pronominal origin, and which appears in the clause initial chain of clitics. Owing to this diversity, the reconstruction of a PIE reflexive form is controversial (Calboli 2000), and some scholars such as Puddu (2005) even assume that PIE did not have a specialized reflexive pronoun (cf. Petit 1999 for discussion).

(1) (Dion. Thr. *Ars* §12, p. 34,3 Uhlig, p. 70 Callipo ὁμωνύμως addubitavit Uhlig deleuerunt Pecorella Callipo)
ἐπίθετον δέ ἐστι τὸ ἐπὶ κυρίων ἢ προσηγορικῶν ὁμωνύμως τιθέμενον (*TG* 12)

(2) (Prisc. gramm. II 60,6)
adiectivum est, quod adicitur propriis vel appellativis
'An adjective is what is added to proper or common nouns'

Accordingly, the adjective was originally used as a sort of nominal apposition rather than as a modifying dependent of the noun. Juxtaposition was more productive in the earliest than in the later stages of IE, where we have a spread of syndetic linkage with time (cf. Brugmann 1904: 651). An original appositive usage may still lay behind the figure of speech of hendiadys, whereby a noun is conjoined with a further noun instead of being modified by the correspondent adjective, as in *pateris libamus et auro* 'we make drink-offering from bowls and gold' (Verg. *G.* 2.192) instead of the expected *pateris aureis libamus*. Actually, it turns out that many figures of speech of the classical rhetorical tradition are grounded in genuine linguistic features of early stages of IE languages (cf. Viti 2010).

The fact that the adjective was not considered as an autonomous part of speech in the classical grammatical tradition may also find a correspondence in typology: since Dixon (1977), it is acknowledged that many languages lack adjectives or restrict them to few functions such as age ("old," "new"), dimension ("little," "big," "long," "short"), value ("good," "bad"), or colour ("black," "white," "red"), while other qualities are coded by nouns or verbs (cf. also Wetzer 1996; Dixon and Aikhenvald 2004). The missed identification of an adjectival category in Latin may be due to both syntactic and morphological reasons. Syntactically, the Latin adjective can have the very same distribution of a noun in the clause without an accompanying substantive in both singular and plural inflection (3), while in configurational languages such as English they need a dummy pronoun (*the old one* versus **the old*); without a dummy pronoun they do not allow pluralisation (*the red ones* versus **the reds*).

(3) (Plaut. *Aul.* 212-13)
MEG: *Dic mihi, quali me arbitrare genere prognatum?*
EVCL: ***Bono***.
MEG: *Quid fide?*
EVCL: ***Bona***.
MEG: *Quid factis?*
EVCL: *Neque* ***malis*** *neque* ***improbis***.

Morphologically, although noun and adjective may display some formal differences in some grammatical cases, and although gender is inherent in nouns but not in adjectives, such distinctions concern adjectives with three endings such as *bonus/bona/bonum* or with two endings such as *hilaris/hilare*, while they are not valid for adjectives with one ending. Adjectives with one ending such as *compos* 'powerful', *dives* 'rich', *felix* 'happy', *particeps* 'participant', *pauper* 'poor', *princeps* 'first', *sospes* 'fortunate', *superstes* 'surviving', *vetus* 'old' are actually nouns. In this sense, a further convergence may be observed between the research traditions of IE studies and of typology. In typology, Dixon (1977) discovered that cross-linguistically adjectives rarely describe human propensity, since qualities such as "happy," "gentle," or "intelligent" are more frequently expressed by nouns. This corresponds to the class of "attributive substantives" identified by Delbrück:

> Es gibt eine Klasse von Wörtern, welche zwischen Substantiven und Adjektiven in der Mitte stehen. Man mag sie attributive Substantiva nennen. Den Grundstock derselben bilden Wörter, welche als Attributiva zu Personalbegriffen gefügt werden können. Sie bezeichnen Menschen nach dem Alter, dem Stände, der Beschäftigung, irgendeiner hervorragenden Eigenschaft. Bald sind sie als Substantiva empfunden, und kommen nur ausnahmsweise als Adjektiva vor, bald sind sie mehr adjektivisch, so dass sie von den Grammatikern als Adjektive einer Endung bezeichnet zu werden pflegen. Dementsprechend ist auch ihre Motionsfähigkeit verschieden. (Delbrück 1893: 420ff.)

2.3 Controversial points of classical parts of speech

One could argue that adjectives with one ending represent a minority in the whole adjectival class, and that for most adjectives a distinction from nouns on the base of (non-)inherent gender may well represent a valid formal distinction. However, even for adjectives with two or three endings, morphological criteria would not lead to a clear split from the nominal category; on the contrary, the application of purely morphological criteria would lead to a multiple splitting of parts of speech. Actually, in his distinction between "lumpers" and "splitters" of parts of speech, Croft (2000: 76) concisely observes that "there is no way to stop splitting." In our case, the traditional division between adjectives of the first class such as *bonus/bona/bonum* and adjectives of the second class such as *hilaris/hilare* captures the fact that the former adjectives are more similar to nouns of *-o-* and *-a*-stems, and the latter are more similar to other nouns such as *civis/mare*, that is, the assignment of morphological features is cross-categorical. Owing to this, the earliest Latin grammarians working on the basis of morphological criteria postulated an

elevated number of declensions, for which no consensus, however, was found. This debate is polemically recorded by Varro (4), who introduced a more economic classification of parts of speech, as we will see below.

(4) (Varro, *ling*. 10.10; translation by Kent 1951: 543–544)
Itaque in eo dissensio neque ea unius modi apparet: nam alii de omnibus universis discriminibus posuerunt numerum, ut Dionysius Sidonius, qui scripsit ea esse septuaginta unum, alii partis eius quae habet casus, cuius eidem hic cum dicat esse discrimina quadraginta septem, Aristocles rettulit in litteras XIIII, Parmeniscus VIII, sic alii pauciora aut plura.
'Therefore in this there is seen a lack of agreement, and not merely of one kind. For some have fixed the number of all the distinctions as a whole, as did Dionysius of Sidon, who wrote that there were seventy-one of them; and others set the number of those distinctions which apply to the words which have cases: the same writer says that of these there are forty-seven, Aristocles reduced them to fourteen headings, Parmeniscus to eight, and others made the number smaller or larger.'

We may hypothesize that the reason for the cross-categorical morphology of adjectives and nouns is due to the fact that, originally, inflection was largely based on the semantics of these lexemes, whereby heteroclite *r/n*-nouns, for example, usually denoted inanimate concrete referents, especially body parts such as *femur feminis*, neuter *s*-nouns usually had abstract referent such as *genus*, and *ter*-nouns were usually kinship terms such as *mater*, etc. (cf. Szemerényi 1990: §7).

One could also argue that ancient grammarians failed to take into consideration comparative and superlative forms in order to distinguish adjectives from nouns, since comparison is typical of adjectives, and not of nouns. Still, forms such as ἀνδρειότερος 'more virile' and ὀξύτατος 'fastest' are interpreted as ὄνομα συγκριτικόν (*nomen comparativum*) and as ὄνομα ὑπερθετικόν (*nomen superlativum*) by Dionysios Thrax (*Ars* 14) and by Priscian (*gramm*. 3.1.1, 3.3.18), so as two types of nouns in this case also. Homer occasionally attests comparative and superlative nouns such as κύντερον lit. 'more dog' (e.g., *Il*. 8.483) and βασιλεύτατος 'most king' (e.g., *Il*. 9.69). The same occurs in Vedic, where even comparative and superlative proper nouns appear: "Indra struck *Vṛtrá*, *the greatest enemy* (*vṛtratáraṃ*), the one without shoulders with the thunderbolt, his big weapon". In this case, the form *vṛtrá* is presented both as a proper noun and as a common noun meaning 'obstacle, enemy' in the same context. In Classical Sanskrit, comparative and superlative are even attested for verbs: *hasiṣyati-tarām* 'he will laugh more', *alabhata-tarām* 'he reached more' (Whitney 1889: §473c), although their

occurrences are rare in texts. The use of comparative or superlative forms for non-adjectival words is even more frequent if one considers the suffixes *-*iyos*- and *-*isto*-, which are immediately derived from the root, instead of *-*teros* and *-*tatos*. The root *yaj* 'sacrifice', for example, produces the Vedic comparative *yájīyas*- 'who sacrifices best' in the same way as the root *jū* 'be fast' gives rise to the comparative *jávīyas*- 'faster' (cf. Renou 1952: 170f.; Bhat 1994: 181–182; Alfieri 2009: 10).[6]

Thus, our interpretation is contrary to the assumption of some scholars such as Croft (1991) and Croft (2000), who plead for the universality of adjectives even when they have the same morphological or syntactic coding as nouns, as in Swahili and in Quechua. In these cases, argues Croft, a word expressing quality is polysemous, with a primary adjectival function and a secondary nominal function derived by null conversion, so that one has "the analysis of adjectival inflections as being functionally distinct from nominal inflections, even in those cases in which they are phonologically identical" (Croft 1991: 74). Such claim is, in my opinion, inappropriate, since a part of speech cannot be presupposed *a priori*, but rather must be formally justified. Functional distinctions are not enough to postulate a category, otherwise they would lead us to a proliferation of categories. One could, for example, introduce a universal category of location or direction, since these spatial concepts must be expressed in all languages. One could also postulate a universal category of conjunctions, since no language is constrained to the expression of separate clauses, but rather all languages must somehow show a sort of clause linkage for the organization of a discourse; from this point of view, asyndeton would be a zero-form of the universal category of conjunction. It is clear that adpositions and conjunctions are not universal, since some languages lack a specific form for these functions. We should therefore assume the same for adjectives, as Latin and Greek grammarians did.

6 As is well known, all this finds a diachronic explanation in the fact that originally neither the suffixes *-*teros* / *-*tatos* nor the suffixes *-*iyos*- und *-*isto*- were properly comparative or superlative structures. While *-*teros* and *-*tatos* expressed the function of a lexical contrast, as in Latin *dexter* 'right' versus *sinister* 'left', *-*iyos*- and *-*isto*- rather had an intensive function (Benveniste 1935: 84–85). The original semantic difference between these suffixes, which motivates their co-occurrence in some early IE languages such as Vedic and Ancient Greek, hints at derivational rather than at inflectional strategies. A derivational analysis of comparison is explicitly offered by Varro, who considers comparative forms (*genus minuendi*) in the same way as diminutive forms (*genus minuendi*): *ab albo albius* like *a cista cistula* (*LL* 8.52).

3 Ancient debate on parts of speech

The detailed set of eight categories of Greek-Roman grammarians is not original, but is rather the result of a long and complicated grammatical reflection ("nous devinons que le système des huit parties du discours, avant d'être ainsi adopté définitivement par la grammaire latine, avait fait l'objet, tant en pays grec que latin, d'infinies discussions entre les spécialistes," Holzt 1994: 81)[7]. It is, however, unclear in the literature which factors may have conditioned the debate that arose around the identification of parts of speech. We think that two fundamental factors influenced the discussion, that is, diachrony on the one hand and genre on the other.

Diachronically, it may be observed that a more reduced number of parts of speech was identified before Dionysios Thrax and Apollonios Dyskolos. Already in the fifth century BC, the sophists defined the noun and the verb as μέρη τοῦ λόγου. The same parts of speech are identified by Plato (fifth–fourth century BC) in his dialogue *Kratylos*, as well as by Aristoteles (fourth century BC), who additionally acknowledged conjunctions.[8] The same occurs in Rome, where we may observe an increase from Varro's four parts of speech to Priscian's eight parts of speech. In his treatise *De Lingua Latina*, Varro (116–27 BC) makes a double distinction in the lexicon according to morphological criteria. First, he makes a distinction as to whether words are declinable or indeclinable (5); declinable words represent a *genus fecundum*, while indeclinable words are a *genus sterile*. Second, his four categories are identified on the basis of the kind of inflection, and particularly on the basis of the presence or absence of case and tense markers (6). A

7 In Greek and Latin grammar two basic theories existed, one of eight and the other of nine categories. The Alexandrian theory consisted of eight categories, because the Alexandrian grammarians made only one category of the ὄνομα (*nomen*) and προσηγορία (*vocabulum*), whereas the Stoics distinguished two different categories (cf. Calboli 2014) and had nine categories.

8 It is no chance that nouns and verbs are the first categories to be assigned an autonomous syntactic status in the Greek-Roman tradition since the fifth century BC. These are precisely the parts of speech that in the classical languages, and in the early IE languages in general, are most strikingly distinct from a formal point of view. The noun is inflected in gender (γένος, *genus*), number (ἀριθμός, *numerus*), and case (πτῶσις, *casus*), while the verb is inflected in tense (χρόνος, *tempus*), mood (ἐγκλίσις, *modus*), person (πρώσοπον, *persona*), number (ἀριθμός, *numerus*), and voice (διάθεσις, *genus verbi*). Nouns and verbs are also the only parts of speech that nowadays are considered by most scholars to be universal, so that any alleged counter-example, as the indigenous North-American language Nootka, belonging to the Wakashan family, turns out to be wrong or not completely correct after a more in-depth analysis, cf. Schachter and Shopen (2007: 11); *contra* Gil (2000). Already in Plato's *Sophist* we find the distinction between ὄνομα and ῥῆμα (cf. Plato, *Cratil* 399a-b, 425a, 431b; *Sophist* 262a).

part of speech with case and without tense is represented by nouns, also called *pars casualis* or *pars appellandi*. A part of speech with tense and without case is represented by verbs, also called *pars temporalis* or *pars dicendi*. The part of speech having both case and tense is the participle, and the part of speech having neither is the adverb.[9]

(5) (Varro, *ling*. 10.14; translation by Kent 1951: 545)
alia verba nusquam declinantur, ut haec vix mox, *alia declinantur, ut ab* lima limae, *a* fero ferebam, *et cum nisi in his verbis quae declinantur non possit esse analogia, qui dicit simile esse* mox *et* nox *errat, quod non est eiusdem generis utrumque verbum, cum* nox *succedere debeat sub casuum rationem,* mox *neque debeat neque possit*.
'Some words are not changed into any other form whatsoever, like *vix* 'hardly' and *mox* 'soon', and others are inflected, like genitive *limae* from *lima* 'file',

9 Since the early IE languages had an elaborate inflection but a rather free word order, it is understandable that grammarians of both the Greek-Roman and the Indian tradition (and therefore also the Neogrammarians and the scholars of IE studies who handle these languages) mainly use morphological criteria, as in the case of Varro. Crucially, however, ancient grammarians have also used syntactic and semantic criteria for at least some parts of speech. Apollonios Dyskolos (*Synt*. 9) used syntactic criteria for prepositions (προθέσεις, lit. 'standing before'), articles (προτακτικὰ ἄρθρα, lit. 'preposed articles'), relative pronouns (ὑποτακτικὰ ἄρθρα, lit. 'postposed articles'), and adverbs (ἐπιρρήματα, lit. 'upon the verb'). Semantic criteria were used for the noun and the verb by Dionysios Thrax, according to whom ὄνομά ἐστι μέρος λόγου πτωτικόν, σῶμα ἢ πρᾶγμα σημαῖνον, σῶμα μὲν οἷον λίθος, πρᾶγμα δὲ οἷον παιδεία, κοινῶς τε καὶ ἰδίως λεγόμενον, κοινῶς μὲν οἷον ἄνθρωπος ἵππος, ἰδίως δὲ οἷον Σωκράτης 'a noun is a part of speech endowed with case, which denotes a body or a fact – a body like "stone", a fact like "education" – and which is called with a general or specific function – general like "man", "horse", specific like "Socrates"' (*Ars* 12). In their consideration of the "endings" (Gr. τελευταῖα, Lat. *exitus*) of a word, as well as of its main meaning and of its position, linguistic categorization as achieved by ancient grammarians turns out to be relevant to modern theory on parts of speech for at least three reasons. First, ancient grammarians imply with their various categorizations that *both* formal *and* semantic criteria must be used for an appropriate classification of parts of speech, and that any method only considering *either* form *or* function (cf. Footnote 1) is condemned to failure. Accordingly, ancient grammarians confirm the attitude of those linguists that nowadays plead for a combination between formal and functional criteria, such as Magnusson (1954: 5ff), Boisson et al. (1994: 20ff), Vogel and Comrie (2000), Haspelmath (2010). Second, ancient grammarians suggest that semantic criteria are more appropriate for open parts of speech, especially for nouns and verbs, which may often display various movements due to pragmatic reasons, and that syntactic criteria are more appropriate for closed parts of speech such as articles, relative pronouns, and prepositions, whose linear order is more fixed than that of nouns and verbs. Third, the clear distinction between nouns and verbs postulated in the Greek-Roman and in the Indian grammatical tradition is fundamentally correct, in that it makes reference to the dichotomy between identification and predication.

imperfect *ferebam* from *fero* 'I bear'; and since Regularity cannot be present except in words which are inflected, he who says that *mox* and *nox* 'night' are alike, is mistaken, because the two words are not of the same kind, since *mox* must come under the system of case-forms, but *mox* not and cannot.'

(6) (Varro, *De Lingua Latina*, X, 17; translation by Kent 1951: 547)
ea (sc. *verba*) *dividuntur in partis quattuor: in unam quae habet casus neque tempora, ut* docilis *et* facilis*; in alteram quae tempora neque casus, ut* docet facit*; in tertiam quae utraque, ut* docens faciens*; in quartam quae neutra, ut* docte *et* facete
'These (words) are divided into four subdivisions: one which has cases but not tenses, like *docilis* "docile" and *facilis* "easy"; a second, which has tenses but not cases, like *docet* "teaches", *facit* "makes"; a third which has both, like *docens* "teaching", *faciens* "making"; a fourth which has neither, like *docte* "learnedly" and *facete* "wittily".'

Interestingly, the parts of speech that diachronically emerged later were also identified later by ancient grammarians. Prepositions, for example, which were adverbs originally, are not considered by Varro. Parts of speech increase further in the post-classical tradition with the identification of adjectives and numerals, so that Latin is assigned ten parts of speech in modern times (cf. Matthews 1967: 153–154). Originally, however, numerals could not be identified as a morpho-syntactically homogeneous part of speech, but rather had a sort of parasitic morphology with respect to other categories: while some low numerals such as *unus/una/unum* behaved as adjectives, some high numerals were actually nouns governing genitive complements (e.g., *duo milia navium*), and intermediate numerals were usually indeclinable. Thus, to account for the parts of speech of the classical languages, we must rely more on the early grammatical observations of Plato, Aristoteles, or Varro than on late grammarians such as Dionysios Thrax, Apollonios Diskolos, or Priscian, since the latter describe a late stage of these languages, when closed categories were grammaticalized to a high extent. This may be seen, for example, in Apollonios Dyskolos' statement that not all parts of speech are equally original and that some of them are "older" (πρεσβύτεροι) than others, as illustrated in (7).

(7) (Apollonios Dyskolos, *Synt*. 1.24)
πρόδηλον δ' ὅτι καὶ τὸ ἀντί τινος παραλαμβανόμενον μεταγενεστέραν θέσιν ὁμολογεῖ <τοῦ μετά τινος>. καὶ εἰ τὸ ἄρθρον μετὰ ὀνόματος καὶ ἡ ἀντωνυμία ἀντ' ὀνόματος, δέδοται ὅτι τὸ συνυπάρχον ἄρθρον τῷ ὀνόματι πρεσβύτρόν ἐστι τῆς ἀντωνυμίας.

> 'It is clear that what can be used instead of something else is also of a later origin than that used together with something else. Since the article is used with a noun and the pronoun instead of a noun, it must be granted that the article, which co-occurs with the noun, is also older than the pronoun.'

Of course, Apollonios' judgment is wrong, since the article develops later than the pronoun, and this clearly shows that at Apollonios' time (second century AD) the original situation of the article was not more diachronically transparent. Accordingly, he interpreted Homeric passages without articles as examples of ellipsis (8).

(8) (*Synt*. §1.118)
προδήλως οὖν κἀκεῖνο λείπει ἄρθρῳ *μῆνιν ἄειδε θεά* {A 1}, τὴν Ἀχιλλέως οὐλομένην μῆνιν
'Obviously the article is deleted by ellipsis in *μῆνιν ἄειδε θεά* (Hom. *Il*. 1.1), e.g., *the* deadly wrath of Achilles'

As in the above-mentioned cases of asyndeton and of hendiadys, it is possible to observe the rhetorical interpretation of a formerly genuine linguistic phenomenon also in the case of ellipsis, whereby a grammatical unit or nexus that at a certain time has not yet been established is later interpreted as the lack of a category.

The relevance of genre to the identification of parts of speech may be seen firstly in the fact that those pleading for less numerous parts of speech were true philosophes, such as the sophists and the Stoics, or in any case scholars with encyclopaedic interests by no means limited to grammar, as in the case of Varro. Instead, strict grammarians such as Dionysios Thrax or Priscian presented greater distinctions in their analysis of linguistic categories. This reveals how not only the explanation, but also the description of the same linguistic phenomenon may be seen in opposite ways according to the theoretical orientation of the analyst. As Trudgill (2011: 32ff) observes, for example, sociolinguists usually see grammar simplification as a result of language contact, while typologists tend to assign language contact an effect of grammatical complexification. In our case, it is understandable that reduction was purported by philosophes, who search the essence of entities and phenomena, while a grammarian simply aims at registering all possible uses that a word may have in a well-formed clause, with resulting categorical proliferation. Second, even within the philosophical domain, we may see that, unlike Theophrastus, Plato did not write a treatise explicitly devoted to grammatical categories, but rather literary dialogues (*Cratylus* and *Sophist*) not

entirely discussing this topic. This may have contributed to Plato's less exhaustive list of parts of speech.

4 Differences between Latin and Greek parts of speech

Although Latin descriptions of parts of speech are often conditioned by Greek models, lexical categorization may differ in the two languages. In this case, Latin mirrors a more archaic linguistic situation than Greek. First, the lack of the article in Latin is a manifestation of a lower level of configurationality with respect to Greek, which is still also assigned a fundamentally non-configurational syntax (Devine and Stephens 1999); a definite article also lacks in Hittite, Old Indian, Slavic, and Baltic. Second, Latin is also characterized by a less tight nexus between adjective and noun, by a less developed use of the participle, and by a poorer inventory of particles; in all these usages, Ancient Greek innovates from the reconstructed PIE.[10]

Discourse particles, having a reduced form whose etymology is often difficult to reconstruct, usually show a rigid word order in the first or second position of a clause or, more rarely, of a phrase, and are employed as pragmatic strategies to signal various types of information structure of topical or focal nature (cf. Bonifazi 2001; Bonifazi 2012). This closed category of speech is much more productive in Ancient Greek than in Latin; according to Kieckers (1926: 131), "das Altgriechische ist unter der indogermanischen Sprachen die an Partikeln reichste."

Ancient Greek is also renowned for its "love for participles" (φιλομετοχή), which in this language show a very flexible usage, capable of rendering the function expressed by various subordinate finite clauses in other languages. Such a high functional load is mirrored by the articulate morphological distinction of Ancient Greek participles according to tense, mood, and voice, which reveals an increasing integration in the verbal paradigm. A similar situation may find some parallels only in Baltic languages inside the IE domain, but represents a decided extension of participial constructions reconstructed for PIE, which were presum-

10 However, articles are originally rather demonstrative pronouns which became so frequent that they seem to be obligatory. On this aspect of the article, cf. Selig (1992: 79–82, 115ff, 200) and Calboli (1997: 112, 186).

ably nominal modifiers with a rather vague adverbial meaning.[11] This original situation better appears in Latin, where some old participles have been even lexicalized, as in the case of *apud* < **ap-wot-* 'having reached' from the same root as *apio, apiscor.*

The distinction between noun and adjective, which we have said was not clear-cut in the ancient IE languages, was in any case even less pronounced in Latin than in Ancient Greek. Latin lacks explicit devices that code the difference between attributive and predicative adjectives, which in Ancient Greek are made possible by various arrangements of the definite article with respect to the adjective and to the noun, as in ἡ μεγάλη πόλις 'the big city' versus ἡ πόλις μεγάλη 'the city is big, the city as big'. Moreover, noun and adjective are often separated by a preposition in Latin, e.g., *tertia in hora*, while this structure is quite rare in Ancient Greek. All this reveals a scarcely developed constituency in Latin, and may also be the reason why no concept for phrase was identified by ancient grammarians. Usually, the missing identification of a grammatical category in antiquity is imputed to a lack of understanding of ancient grammarians (cf. Householder 1981: 2). More probably, however, when a part of speech or grammatical distinction of our modern IE languages was not identified in antiquity, we may argue that it was also not so relevant in the ancient IE languages themselves. This seems to hold also for the phrase: the use of adpositions in hyperbaton, for example, is due to the fact that adpositions expressed an adverbial function in the early stages of IE, as we have seen in Section 2. Since adjacency between adposition and noun was originally optional, the concept of a phrase was not necessary for ancient grammars, which were prescriptive in nature and therefore only considered obligatory linguistic phenomena.

5 Comparison with Old Indian parts of speech

A similar situation of a limited set of parts of speech, as described by Plato and Aristotle in Greece or by Varro in Rome rather than by later grammarians, also appears in India. In Sanskrit, only a limited number of "parts of speech" (*padajātāni*) are recognized. The older theorization of parts of speech, accredited to Yāska, who wrote a treatise on etymology (*Nirukta*) between the seventh and the fifth century BC, identifies noun (*nāman-*), verb (*ākhyāta-*), preverb (*upasarga-*), and particle (*nipāta-*).

11 In Hittite the only participle is that at *–ant* and does not master completely also the voice's distinction: it is passive of transitive verbs, active of intransitives (cf. Friedrich 1960: 144ff).

(9) (Yāska, *Nirukta* 1.1)
tad yāny *catvāri* *padajātāni*
this RP:NOM.N.PL four part.of.speech(N):NOM.PL
nāmākhyāte *copasarganipātāś* *ca*
noun.verb(N):NOM.DU and.preverb.particle(M):NOM.PL and
tānīmāni *bhavanti*
these.these be:IND.PRS3PL
'Noun and verb, preverb and particle, these here are the parts of speech that are acknowledged.'

According to Yāska, nouns and verbs may be defined according to their semantic features, whereby a verb denotes a "process, event" (*bhāva-*) and a noun denotes a "substance" (*sattva-*).[12] Instead, preverbs and particles are defined according to their relational properties with respect to other parts of speech: preverbs are associated with verbs, while particles have no association with verbs. Even fewer parts of speech are found in Pāṇini (fourth century BC), who only distinguished verb (*tiṇanta*), noun (*subanta*), and indeclinable words (*avyaya*), the latter called so since they "do not change" (*na viyanti*).[13]

Two fundamental similarities may be seen between the Indian and the Greek-Roman tradition. First, the categorical distinction between nouns and verbs is strongly maintained also in India. Here the verb comprehends all word inflected for tense (*kāla*), mood (*artha*), voice (*upagraha*), person (*puruṣa*), and number (*vacana*). The noun, instead, includes not only genuine substantives, but also pronouns, adjectives, and participles, that is, all parts of speech inflected by number (*vacana*), case (*kāraka*), and (except pronouns) gender (*liṅga*). Second, no separate category for the adjective is acknowledged in India either; in this case also, the adjective is considered a specification of the noun. As Cardona (1973: 86)

12 Cf. *Nir.* 1.1: *tatraitan nāmākhyātayor lakṣaṇaṃ pradiśanti bhāva-pradhānam ākhyātam sattva-pradhānāni nāmāni* 'here they represent this sign for noun and verb: a verb has an event as main meaning, the noun has a substance as main meaning'.

13 The possibility of different categorizations of the lexicon is explicitly recognized by Bhartṛhari (half of the fifth century AD), the author of the *Vākyapadīya* '(treatise on) clause (*vākya*) and word (*pada*)', who writes: *dvidhā kaiś cit padaṃ bhinnaṃ caturdhā pañcadhāpi vā* 'the general category of the word is divided by some in two parts, by some others in four parts or in five parts' (*Vāk.* 3.1.1). Accordingly, there is first a binary distinction between *subanta*, which have nominal endings, and *tiṇanta*, which have verbal endings. At this point, one can further distinguish preverbs (*upasarga*) and particles (*nipāta*), according to whether these indeclinable words are linked with a verb or not, as already postulated by Yāska. A fifth group (*karmapravacanīya*) consists of indeclinable words that have a syntactic relationship with nouns, and which correspond to our prepositions or postpositions.

observes, "One remarkable feature of Pāṇini's grammar is this: although it consists of rules for deriving Sanskrit forms and sentences [. . .], no particular provision is made in it for concord between adjectives and nouns qualified by them" (cf. also Bhat 2000: 47). In the same vein, the adverb is interpreted by Indian grammarians as a modification of the verb and is not assigned an independent category, unlike in Greece and in Rome, where a category of ἐπίρρημα / *adverbium* is recognized, and where Apollonios Dyskolos even devoted to the adverb an entire book entitled περὶ ἐπιρρημάτων. Both the adverb and the adjective are called *viśeṣaka* 'qualifier' or *viśeṣaṇa* 'qualification' in India, so they are deemed additional words for the main categories of verbs and of nouns. The same scarce distinction is observed in Western grammars of Old Indian, as in Whitney (1889: §1096), who wrote: "The indeclinable words are less distinctly divided into separate parts of speech in Sanskrit than is usual elsewhere in Indo-European language – especially owing to the fact that the class of prepositions hardly has a real existence, but is represented by certain adverbial words which are to a greater or lesser extent used prepositionally"; the same holds true for conjunctions and particles.

Thus, Sanskrit agrees more with Latin than with Ancient Greek in its scarcely developed use of closed categories. Crucially, this does not depend on a lower level of morphological distinction; on the contrary, the inflectional and derivational apparatus of Old Indian is as articulated as, or even more articulated than, that of Latin and Ancient Greek. The same scarce grammaticalization of closed categories may be therefore reconstructed also for PIE.

6 Typological parallels

The fact that Latin and Ancient Greek originally had less numerous closed categories is consistent with the findings of typological research, whereby closed categories are weakly developed in languages endowed with rich inflectional and synthetic resources:

> Closed word classes tend to play a more prominent role in analytic languages than they do in synthetic languages. This is because much of the semantic and syntactic work done by the members of closed word classes in analytic languages is done instead by affixes in synthetic languages. (Schachter and Shopen 2007: 23)

In this, the early IE languages agree with many non-IE languages in which closed categories such as preforms, auxiliaries, and conjunctions are barely distinguished. Only two categories such as nouns and verbs are ascribed to Bilin, for

example, a Cushitic language of Eritrea (Palmer 1967). Three parts of speech are ascribed to Yokuts (Newman 1967: 183ff) and to Yurok (Robins 1967: 215ff), two indigenous languages of California, as well as to Nord-Sotho, a Niger-Kongo-Bantu language spoken in South Africa (Van Wyk 1967: 260ff). A similar situation holds true for Igbo, a Niger-Kongo language of Nigeria, in which noun, verb, particle, and interjection are identified (Carnochan 1967: 7).

The fact that strongly synthetic languages, endowed with a rich repertoire of inflectional resources, can more easily dispense with configurations consisting of forms belonging to closed parts of speech, may be especially seen in ancient languages, also outside the IE domain, when many closed parts of speech were barely grammaticalized. Classical Arabic, for example, is traditionally assigned three parts of speech, that is, noun, verb, and particle since Sîbawayhi's *Kitāb* (cf. Versteegh 1997: 4), whence this distinction was also applied by Jewish grammarians to Hebrew. The same parts of speech emerge in Ugaritic, another Semitic language, where despite occasional categorical overlaps and subcategories "the three-division description is nevertheless important, for the elements belonging to overlapping categories and to subcategories are clearly definable according to one or other of the primary categories" (Pardee 2004: 293). In particular, the conflation of adjectives in the same category as nouns was quite common in the ancient area of the Mediterranean and Near East: it occurs, for example, in Ancient Egyptian (Afro-Asiatic; Loprieno 2004: 175) and in Elamite (isolate; Stolper 2004: 74). This may open the possibility that factors of contact, besides inheritance, may have been of some relevance for linguistic categorization.

7 Conclusions

Based on the evidence of Old Indian and on *early* grammatical observations of Latin and Greek, we may hypothesize that PIE was characterized by a smaller number of closed categories. Originally, parts of speech were poly-functional, and the borders between them, in particular between nouns and adjectives on the one hand, and between adverbs and prepositions, adverbs and conjunctions, adverbs and particles on the other, were not watertight. The semantic heterogeneity of the adverb, traditionally considered a sort of "waste-basket category" (Schachter and Shopen 2007: 19–20), is a residue of this original poly-functionality, and may be seen in the Greek term πανδέκτης lit. 'all-receiving' (sc. μερισμός 'part of speech'). This apparent problem of categorical *Einzelgänger* or *Grenzgänger* (Döring and Geilfuß-Wolfgang 2014) may be solved if we consider that originally parts of speech largely retained their semantic properties and therefore did not yet belong to homogeneous morpho-syntactic classes. Moreover, we have seen

that the different acknowledgment of parts of speech by ancient grammarians depends on factors of diachrony and of genre. The "fluidity," in Hengeveld's terms,[14] of the Latin parts of speech is due to the greater role played by inflection and synthesis in Latin, and more generally in the early IE languages, compared to modern IE languages, as well as to the scarce grammaticalization of prepositions, conjunctions, and particles, which in Latin and in early IE often still maintain their original lexical meaning. In this, ancient IE languages differ from modern IE languages and rather resemble some non-IE languages on whose basis the traditional categories of classical grammars have been more strongly contested.

Acknowledgments: I express my gratitude to Gualtiero Calboli for his very helpful corrections and comments on a first version of this paper.

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14 According to Hengeveld (1992), "specialized" languages have certain parts of speech for any syntactic function, so that the formal boundaries among verbs, nouns, adjectives, and adverbs may be quite easily identified, as in English. "Flexible" languages combine two or more functions in a single part of speech; Hengeveld mentions the case of Quechua, where the meanings of nouns, verbs, and adjectives are expressed by only one category. "Rigid" languages lack one or more parts of speech, whose functions are represented by alternative formal devices, as in !Xû, a Khoisan language spoken in Namibia and in Angola, which according to Hengeveld does not possess own categories for adjectives and for adverbs. This distinction may also concern different constructions inside the same language, whereby PIE would be rigid in regard to auxiliaries and articles, flexible in regard to nouns and adjectives, and specialized in regard to the verb.

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